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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,543	11/01/2007	Shigeo Okeya	88556.0027	1534

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HOGAN & HARTSON L.L.P.
1999 AVENUE OF THE STARS
SUITE 1400
LOS ANGELES, CA 90067

EXAMINER

COURSON, TANIA C

ART UNIT	PAPER NUMBER
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2841

NOTIFICATION DATE	DELIVERY MODE
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12/22/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ctkeyner@hhlaw.com
LAUSPTO@hhlaw.com
lbrivero@hhlaw.com

Office Action Summary	Application No. 10/599,543	Applicant(s) OKEYA, SHIGEO	
	Examiner TANIA C. COURSON	Art Unit 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29SEP06 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: ____. |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date
:29SEP06,06DEC06,25SEP07,08JUL09.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7 and 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kao (US 5,440,484).

Kao disclose in Figures 1-11, a calibration method and apparatus comprising:

With respect to claims 1-7 and 9-12:

- a) a geomagnetic sensor (16) for detecting earth-magnetism (Fig. 1) and a control unit (20) for calculating the geographical bearing based on detection values of the geomagnetic sensor (Fig. 1), wherein the control unit monitors for an event whereby an operation of an electronic part mounted at the mobile bearing calculator changes, and corrects (22) the geographical bearing in accordance with occurrence of the event (Fig. 1);
- b) further provided with a display unit (32), said control unit displaying said detected geographical bearing as information of the bearing on said display unit (Fig. 1);

Art Unit: 2841

- c) wherein said control unit displays a pictograph indicating which direction a specific bearing is on said display unit as said information of the bearing on said display unit based on said geographical bearing (28);
- d) wherein said control unit switches the display of said pictograph to a mode different from that before said correction when performing said correction (28);
- e) wherein said control unit can acquire a map and display said map on said display unit, and performs a first display processing rotating said map to displaying as said information of the bearing linked with said geographical bearing (28);
- f) wherein said control unit switches to perform a second display processing fixing the display of said map to a specific bearing without linking with said geographical location when displaying said map by said first display processing and performing said correction (28);
- g) further having a positional information acquiring unit for acquiring information relating to the geographical location of a current position and a wireless communication unit able to connect to a communication network, said control unit acquiring as said map a map information of surrounding of a current position specified based on positional information acquired at said positional information acquiring unit, from said communication network by said wireless communication unit (34);

Art Unit: 2841

- h) further provided with a storage unit for storing correction data corresponding to a plurality of different events, said control unit reading out correction data corresponding to an event and performing said correction when detecting the occurrence of said event (30);
- i) wherein said control unit corrects said geographical bearing by using said correction data to correct detection values of said geographic sensor (Fig. 1);
- j) wherein said geomagnetic sensor detects earth-magnetism at a plurality of directions among which at least two perpendicularly intersect each other, and said storage unit stores a plurality of correction values corresponding to detection values of earth-magnetism of said plurality of directions (Fig. 1);
- k) wherein said control unit adds correction values corresponding to said correction data to detection values of earth-magnetism of said plurality of directions when correcting detection values of said geomagnetic sensor (Fig. 1).

With respect to method claim 13:

- a) A bearing correction method in a mobile bearing calculator provided with a geomagnetic sensor (16) for detecting earth-magnetism and calculating a geographical bearing based on detection values of said geomagnetic sensor (Fig. 1), comprising a step of monitoring for an event whereby an operation of an electronic part mounted on the mobile bearing calculator changes and a

Art Unit: 2841

step of correcting (22) the geographical bearing in accordance with the occurrence of the event (Fig. 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kao in view of Manfred (US 7,146,740 B2).

Kao disclose a calibration method and apparatus, as stated above in paragraph 2.

Kao further discloses the following:

- a) provided with a GPS (18) signal receiver able to receive GPS signals from a GPS satellites (Fig. 1), said position acquiring unit specifying said positional information based on the GPS signal from said GPS satellite (Fig. 1).

Kao does not disclose the following:

- a) provided with a GPS signal receiver able to receive GPS signals from a plurality of GPS satellites.

Art Unit: 2841

Manfred teaches a method and apparatus for automatic magnetic compensation that consists of provided with a GPS signal receiver able to receive GPS signals from a plurality of GPS satellites (column 6, lines 3-9). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the calibration method and apparatus of Kao, so as to include the ability to receive GPS signals from a plurality of GPS satellites, as taught by Manfred, in order to increase the accuracy of the mapping.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art cited on PTO-892 and not mentioned above disclose related structures or features thereof.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tania C. Courson whose telephone number is (571) 272-2239.

The examiner can normally be reached on Monday-Friday from 7:30AM to 2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinhee Lee, can be reached on (571) 272-1977.

The fax number for this Organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2841

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. Bradley Bennett/
Primary Examiner, Art Unit 2841
TCC
December 16, 2009